

WHAT IS CLAIMED IS:

1. An image reading apparatus comprising:

an image reading means for reading image data on a predetermined pixel region basis;

5 a storage means for storing the image data; and

a read pixel changing means for changing the predetermined pixel region according to the storage capacity of said storage means.

10 2. An image reading apparatus according to Claim

1, wherein said read pixel changing means expands the predetermined pixel region as storage capacity required for storing read image data in said storage means is reduced.

15 3. An image reading apparatus according to Claim

2, wherein the storage capacity required for storing read image data in said storage means corresponds to the kind of original.

20 4. An image reading apparatus according to Claim

2, wherein the storage capacity required for storing read image data in said storage means corresponds to the reading mode.

25 5. An image reading apparatus according to Claim

2, wherein the storage capacity required for storing

read image data in said storage means corresponds to the reading resolution.

6. An image reading apparatus according to Claim 5 3, wherein the original includes at least a cut paper sheet, a postcard, and a photograph.

7. An image reading apparatus according to Claim 10 4, wherein the reading mode includes a monochrome mode and a full color mode.

8. An image reading apparatus according to Claim 15 1, further comprising a moving means for effecting a relative movement of said image reading means and the original, wherein said read pixel changing means changes the predetermined pixel region in accordance with the movement amount of said moving means.

9. An image reading apparatus according to Claim 20 1, wherein said image reading means performs overlap reading on a part of adjacent predetermined pixel regions.

10. An image reading apparatus according to Claim 25 9, wherein the overlap reading range is changed in accordance with the predetermined pixel region changed by said read pixel changing means.

11. An image reading apparatus according to Claim 9, further comprising an averaging means for averaging image data obtained through overlap reading.

5 12. An image reading apparatus comprising:

a reading head for reading an original image by using a line sensor;

a moving means for effecting a relative movement of the reading head and the original image;

10 a control means for controlling said moving means so as to repeat a relative movement in a first direction perpendicular to the direction in which the line sensor is arranged and a relative movement in a second direction in which the line sensor is arranged;

15 a storage means for storing image data read by the reading head; and

a setting means for setting the reading width of the reading head in one relative movement in the first direction on the basis of the storage capacity of said  
20 storage means.

13. An image reading apparatus comprising:

a reading head for reading an original image by using a line sensor;

25 a moving means for effecting a relative movement of the reading head and the original image;

a control means for controlling said moving means

so as to repeat a relative movement in a first  
direction perpendicular to the direction in which the  
line sensor is arranged and a relative movement in a  
second direction in which the line sensor is arranged;  
5 and

a setting means for setting the reading width of  
the reading head in one relative movement in the first  
direction on the basis of the resolution with which the  
original image is read.

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14. An image reading apparatus comprising:

a reading head for reading an original image by  
using a line sensor;

15 a moving means for effecting a relative movement  
of the reading head and the original image;

a control means for controlling said moving means  
so as to repeat a relative movement in a first  
direction perpendicular to the direction in which the  
line sensor is arranged and a relative movement in a  
20 second direction in which the line sensor is arranged;  
and

a setting means for setting the reading width of  
the reading head in one relative movement in the first  
direction on the basis of the size of the original.

25

15. A storage medium for storing a program for  
controlling an image reading apparatus so as to read

image data on a predetermined pixel region basis, by an  
image reading means store the read image data in a  
storage means, and change the predetermined pixel  
region in accordance with the storage capacity of said  
5 storage means.

16. A storage medium for storing a program for  
controlling an image reading apparatus comprising a  
reading head for reading an original image by using a  
10 line sensor; a moving means for effecting a relative  
movement of the reading head and the original image; a  
control means for controlling the moving means so as to  
repeat a relative movement in a first direction  
perpendicular to the direction in which the line sensor  
15 is arranged and a relative movement in a second  
direction in which the line sensor is arranged; and a  
storage means for storing image data read by the  
reading head,

wherein said program includes a setting module for  
20 setting the reading width of the reading head in one  
relative movement in the first direction on the basis  
of the storage capacity of said storage means.

17. A storage medium for storing a program for  
25 controlling an image reading apparatus comprising a  
reading head for reading an original image by using a  
line sensor; a moving means for effecting a relative

movement of the reading head and the original image;  
and a control means for controlling said moving means  
so as to repeat a relative movement in a first  
direction perpendicular to the direction in which the  
5 line sensor is arranged and a relative movement in a  
second direction in which the line sensor is arranged,

wherein said program includes a setting module for  
setting the reading width of the reading head in one  
relative movement in the first direction on the basis  
10 of the resolution with which the original image is  
read.

18. A storage medium for storing a program for  
controlling an image reading apparatus comprising a  
15 reading head for reading an original image by using a  
line sensor; a moving means for effecting a relative  
movement of the reading head and the original image;  
and a control means for controlling said moving means  
so as to repeat a relative movement in a first  
20 direction perpendicular to the direction in which the  
line sensor is arranged and a relative movement in a  
second direction in which the line sensor is arranged,

wherein said program includes a setting module for  
setting the reading width of the reading head in one  
25 relative movement in the first direction on the basis  
of the size of the original.